

X. Polarizers

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FIG. 3-Gold chloride with 1+, -)-escaine.

TABLE 3-Abundance resign.

Compound	m∕e \$4:98	m/e 152:150
Cocsine	1<	1-2
seudococaine	<1	3
Allococaine	<1	2-10
Pseudoailococaine	>1	3-5

122, 182, 198, and 272 are at a lower relative abundance and the motocular ion  $(m/e \ J03)$  is at a higher relative abundance than the corresponding ions of allocoraine.

The mass spectral data for the corsines were obtained by direct insertion techniques rather than via a GLC interface. This was necessitated by a tendency of the less stable diasterensisomers, in particular pseudoallococaine, to thermally eliminate the elements of benzoic acid. The product of this thermal elimination is 2-carbomethoxytropidine (anhydroecyonine methyl ester). The electron impact fragmentation of this compound results in a spectrum with an m/e 152 base peak (Fig. 12). Since the differentiation of the diastereoisomeric cocaines relies heavily on the relative abundance of the ion at m/e 152, thermal elimination in the GLC/MS interface could interfere with that assessment.